

Amendments to the Claims:

The following Listing of Claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1 – 50. (Canceled).

51. (Currently Amended) Unit-dose syringe for a multi-component material, comprising:

a cartridge having a front end and a rear end, and having a compartment for each component,

a static mixer connectable with said cartridge at its front end,

a mixing tip ~~being~~ integrally formed as one part with ~~connected to~~ the cartridge at said front end of said cartridge and receiving said static mixer, ~~said mixing tip and said cartridge being integrally formed as one part,~~ and

a plunger being located in the inactivated state of the syringe, at said rear end of said cartridge, and moveable towards the front end of said cartridge for dispensing material from said cartridge through said mixing tip.

Claim 52. (Currently Amended) The syringe of claim 51, wherein said static mixer comprises closure plugs at its rear end for closing ~~[[the]]~~ outlet openings of ~~said compartments~~ each compartment of said cartridge.

Claim 53. (Previously Presented) The syringe of claim 51 or 52, wherein said static mixer comprises a mixing helix.

Claim 54. (Previously Presented) The syringe of claim 53, wherein said static mixer comprises an outlet tip at the front end of said mixing helix.

Claim 55. (Previously Presented) The syringe of claim 54, wherein said static mixer is collapsible.

Claim 56. (Previously Presented) The syringe of claim 55, wherein said outlet tip of said static mixer projects from the front end of said mixing tip when said static mixer is received in said mixing tip.

Claim 57. (Previously Presented) The syringe of claim 56, wherein said outlet tip of said static mixer is accommodated within said mixing tip during storage of said syringe.

Claim 58. (Previously Presented) The syringe of claim 57, wherein said front end of said mixing tip and said outlet tip of said static mixer comprise corresponding retainers that allow said outlet tip to project beyond said front end of said mixing tip upon activation of said syringe but prevent that said outlet tip completely extends beyond said mixing tip.

Claim 59. (Previously Presented) The syringe of claim 58, wherein said retainers at said front end of said mixing tip comprises a recess in the wall of said mixing tip, and said retainer at the outlet tip comprises a projection at the circumference of the rear end of said outlet tip, said projection being engagable by said recess.

Claim 60. (Previously Presented) The syringe of claim 59, wherein said mixing tip forms an extension of a first of said compartments of said cartridge.

Claim 61. (Previously Presented) The syringe of claim 60, wherein said first and a second compartment are connected by a passageway being provided adjacent said first end of said cartridge.

Claim 62. (Previously Presented) The syringe of claim 61, wherein said second compartment comprises a plug sealing said second compartment against that opening of said passageway facing towards the interior of said second compartment.

Claim 63. (Previously Presented) The syringe of claim 62, wherein said static mixer comprises at its rear end a plug sealing said first compartment against that opening of said passageway facing towards the interior of said first compartment.

Claim 64. (Previously Presented) The syringe of claim 63, wherein activation of said syringe by said plunger moves said plugs along the longitudinal direction of said syringe in order to free said passageway so that material is allowed to flow from said compartments into said mixing tip.

Claim 65. (Withdrawn) Unit-dose syringe for a multi-component material, comprising:

a cartridge having a first end and a second end, and having a compartment for each component,

a mixing tip being connectable with said cartridge at its first end and receiving a static mixer, and

a plunger for dispensing material from said cartridge through said mixing tip, said plunger being arranged at said second end of said cartridge,

(wherein said cartridge comprises a recess at its first end in longitudinal direction for receiving the rear end of said mixing tip, and

wherein said cartridge comprises radial opening in the wall of said recess providing passageways from said compartments to said recess.)

Claim 66. (Withdrawn) The syringe of claim 65, wherein said mixing tip comprises radial openings that correspond to said radial openings in said recess wall to provide passageways from said compartments into said mixing tip.

Claim 67. (Withdrawn) The syringe of claim 66, wherein said static mixer comprises a spacer at the rear end of a mixing helix, said spacer extending along the longitudinal axis of said static mixer.

Claim 68. (Withdrawn) The syringe of claim 67, wherein said static mixer comprises a closure element at the rear end of said spacer.

Claim 69. (Withdrawn) The syringe of claim 68, wherein said spacer extends in a longitudinal direction along the width of said passageways at said rear end of said mixing tip such that the closure element is located rearwards of said passageway openings.

Claim 70. (Withdrawn) Unit-dose syringe for a multi-component material, comprising
a cartridge having a first end and a second end, and having a compartment for each component, said compartments extending between said first end and said second end;
a static mixer being integrally formed with said cartridge at said first end;
a plunger for dispensing material from said cartridge, said plunger being arranged at said second end of said cartridge; and
a mixing tip connectable to said cartridge at said first end of said cartridge and receiving said static mixer.

Claim 71. (Withdrawn) The syringe of claim 70, wherein each compartment of said cartridge comprises outlet openings at the first end of said cartridge.

Claim 72 (Withdrawn). The syringe of claim 71 wherein said outlet openings of said compartments are directed along the longitudinal axis of said syringe.

Claim 73. (Withdrawn) The syringe of claim 72, wherein said mixing tip comprises an axially acting rotary slide valve at its end being connectable to said first end of said cartridge.

Claim 74. (Withdrawn) The syringe of claim 73, wherein said axially acting rotary slide valve comprises passageways and seal areas that are alternately alignable with said outlet openings of said cartridge compartments.

Claim 75. (Withdrawn) The syringe of claim 74, wherein said valve comprises a locking mechanism being engageable with a corresponding locking mechanism at said first end of said cartridge.

Claim 76. (Withdrawn) The syringe of claim 75, wherein said locking mechanism at said cartridge comprises pins that are engagable in corresponding recesses forming said locking mechanism of said valve.

Claim 77. (Withdrawn) The syringe of claim 76, wherein said pins and said recesses are formed such that a thread lock is obtained interlocking said mixing tip and said cartridge in longitudinal direction of said syringe.

Claim 78. (Withdrawn) The syringe of claim 77, wherein said outlet openings of said compartments are directed transverse to the longitudinal axis of said syringe.

Claim 79. (Withdrawn) The syringe of claim 78, wherein said mixing tip comprises a radially acting rotary slide valve at its end being connectable to said first end of said cartridge.

Claim 80. (Withdrawn) The syringe of claim 79, wherein said radially acting rotary slide valve comprises a body member forming a cavity that corresponds to the outer surface of said cartridge in the area of its first end for receiving said first end of said cartridge.

Claim 81. (Withdrawn) The syringe of claim 80, wherein said wall of said cavity comprises recesses along the longitudinal axis of said body member, said recesses being alignable with said outlet openings of said cartridge for forming passageways from said compartments of said cartridge to said static mixer.

Claim 82. (Previously Presented) The syringe of any of claims 51, 65, 70, or 85, wherein said cartridge comprises at its outer surface extensions or protrusions being sized and shaped to provide said cartridge with a substantially circular circumferential outer surface.

Claim 83. (Previously Presented) The syringe of any of claims 51, 65, 70, or 85, wherein said compartments are arranged concentrically.

Claim 84. (Previously Presented) The syringe of any of claims 51, 65, 70, or 85, wherein said cartridge is made from a thermoplastic elastomer.

Claim 85. (Withdrawn) Unit-dose syringe for a multi-component material, comprising

a cartridge having a first end and a second end, and having at least a first compartment for a first component and a second compartment for a second component, said compartments extending between said first end and said second end;

a plunger for dispensing material from said cartridge, said plunger being arranged at said second end of said cartridge; and

a mixing tip connectable to said cartridge at said first end of said cartridge and receiving a static mixer.

wherein said first compartment is connectable to said second compartment by a first passageway, and said second compartment is connectable to said mixing tip by a second passageway.

Claim 86. (Withdrawn) The syringe of claim 85, wherein a first compartment of said cartridge comprises said first passageway at said first end of said cartridge.

Claim 87. (Withdrawn) The syringe of claim 86, wherein said first compartment and a second compartment are rotatable relative to each other.

Claim 88. (Withdrawn) The syringe of claim 87, wherein the wall of said first compartment comprises a first channel being inclined with regard to the longitudinal axis of the syringe, and wherein the wall of said second compartment comprises a second channel being inclined with regard to the longitudinal axis of said syringe, and wherein rotational movement of said first compartment relative to said second compartment brings said first inclined channel and said second inclined channel into alignment to provide a passageway from said first to said second compartment.

Claim 89. (Previously Presented) The syringe of any of claims 51, 65, 70, or 85, being pre-filled with a multi-component dental material.